

19-OCT-09
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GEORGIA DEPARTMENT OF TRANSPORTATION
PRECONSTRUCTION DIVISION - OFFICE OF BRIDGE & STRUCTURAL DESIGN
LIVE LOAD CASE PROGRAM
REVISED: JUNE 26, 2008

PROB. NO. LL01

70.08' CURB-TO-CURB; 9 BEAMS; 110.00' AVERAGE SPAN

BRIDGE WIDTH	X1	X2	CENTER LINE DISTANCE	# OF BEAMS	REACTION FORCE	MAXIMUM # OF TRUCKS	# OF COLUMNS	COLUMN WIDTH	SKEW ANGLE
73.330	3.625	3.625	36.665	9	58.455	5	3	5.000	0

D1	D2	D3	D4	D5	D6	D7	D8	D9	D10	D11	D12	D13	D14	D15	D16	D17	D18	D19	D20
3.492	8.293	8.293	8.293	8.293	8.293	8.293	8.293	8.293											

XCOL1	XCOL2	XCOL3	XCOL4	XCOL5
13.000	23.665	23.665		

LIVE LOAD CASE # 1 1 TRUCKS

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BEAM	WHEEL FRACTION	P-LOAD
1	1.2444	72.743
2	0.7556	44.167
3	0.0000	0.000
4	0.0000	0.000
5	0.0000	0.000
6	0.0000	0.000
7	0.0000	0.000
8	0.0000	0.000
9	0.0000	0.000

LIVE LOAD CASE # 2 2 TRUCKS

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BEAM	WHEEL FRACTION	P-LOAD
1	1.2444	72.743
2	1.5883	92.846
3	1.1672	68.232
4	0.0000	0.000
5	0.0000	0.000
6	0.0000	0.000
7	0.0000	0.000
8	0.0000	0.000
9	0.0000	0.000

LIVE LOAD CASE # 3 3 TRUCKS

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BEAM	WHEEL FRACTION	P-LOAD
1	1.2444	72.743
2	1.5883	92.846
3	1.7395	101.685
4	1.2765	74.618
5	0.1512	8.839
6	0.0000	0.000
7	0.0000	0.000
8	0.0000	0.000
9	0.0000	0.000

LIVE LOAD CASE # 4 4 TRUCKS

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BEAM	WHEEL	FRACTION	P-LOAD
1	1.2444		72.743
2	1.5883		92.846
3	1.7395		101.685
4	1.6430		96.039
5	1.4277		83.457
6	0.3570		20.871
7	0.0000		0.000
8	0.0000		0.000
9	0.0000		0.000

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LIVE LOAD CASE # 5 5 TRUCKS

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BEAM	WHEEL	FRACTION	P-LOAD
1	1.2444		72.743
2	1.5883		92.846
3	1.7395		101.685
4	1.6430		96.039
5	1.5883		92.846
6	1.6335		95.489
7	0.5629		32.903
8	0.0000		0.000
9	0.0000		0.000

LIVE LOAD CASE # 6 1 TRUCKS

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BEAM	WHEEL	FRACTION	P-LOAD
1	0.0000		0.000
2	0.0000		0.000
3	0.0000		0.000
4	0.0000		0.000
5	0.0000		0.000
6	0.0000		0.000
7	0.0000		0.000
8	0.7551		44.139
9	1.2449		72.771

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LIVE LOAD CASE # 7 2 TRUCKS

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BEAM	WHEEL	FRACTION	P-LOAD
1	0.0000		0.000
2	0.0000		0.000
3	0.0000		0.000
4	0.0000		0.000
5	0.0000		0.000
6	0.0000		0.000
7	1.1668		68.203
8	1.5883		92.846
9	1.2449		72.771

LIVE LOAD CASE # 8 3 TRUCKS

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BEAM	WHEEL FRACTION	P-LOAD
1	0.0000	0.000
2	0.0000	0.000
3	0.0000	0.000
4	0.0000	0.000
5	0.1510	8.825
6	1.2765	74.618
7	1.7393	101.671
8	1.5883	92.846
9	1.2449	72.771

LIVE LOAD CASE # 9 4 TRUCKS

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BEAM	WHEEL FRACTION	P-LOAD
1	0.0000	0.000
2	0.0000	0.000
3	0.0000	0.000
4	0.3568	20.857
5	1.4275	83.443
6	1.6432	96.053
7	1.7393	101.671
8	1.5883	92.846
9	1.2449	72.771

LIVE LOAD CASE # 10 5 TRUCKS

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BEAM	WHEEL FRACTION	P-LOAD
1	0.0000	0.000
2	0.0000	0.000
3	0.5626	32.889
4	1.6333	95.475
5	1.5883	92.846
6	1.6432	96.053
7	1.7393	101.671
8	1.5883	92.846
9	1.2449	72.771

LIVE LOAD CASE # 11 1 TRUCKS

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BEAM	WHEEL FRACTION	P-LOAD
1	0.0000	0.000
2	0.0000	0.000
3	0.0000	0.000
4	0.3618	21.146
5	1.2765	74.618
6	0.3618	21.146
7	0.0000	0.000
8	0.0000	0.000
9	0.0000	0.000

LIVE LOAD CASE # 12 2 TRUCKS

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BEAM	WHEEL FRACTION	P-LOAD
1	0.0000	0.000
2	0.0000	0.000
3	0.5676	33.178
4	1.6382	95.764
5	1.4324	83.732
6	0.3618	21.146
7	0.0000	0.000
8	0.0000	0.000
9	0.0000	0.000

LIVE LOAD CASE # 13

3 TRUCKS

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BEAM	WHEEL FRACTION	P-LOAD
1	0.0000	0.000
2	0.0000	0.000
3	0.5676	33.178
4	1.6382	95.764
5	1.5883	92.846
6	1.6382	95.764
7	0.5676	33.178
8	0.0000	0.000
9	0.0000	0.000

LIVE LOAD CASE # 14

4 TRUCKS

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BEAM	WHEEL FRACTION	P-LOAD
1	0.0000	0.000
2	0.8233	48.129
3	1.7442	101.960
4	1.6382	95.764
5	1.5883	92.846
6	1.6382	95.764
7	0.5676	33.178
8	0.0000	0.000
9	0.0000	0.000

LIVE LOAD CASE # 15

5 TRUCKS

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BEAM	WHEEL FRACTION	P-LOAD
1	0.0000	0.000
2	0.8233	48.129
3	1.7442	101.960
4	1.6382	95.764
5	1.5883	92.846
6	1.6382	95.764
7	1.7442	101.960
8	0.8233	48.129
9	0.0000	0.000

LIVE LOAD CASE # 16

2 TRUCKS

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I      I      I      I      I      I      I      I      I
I      I      I      I      I      I      I      I      I
I      I      I      I      I      I      I      I      I
BEAM  WHEEL FRACTION  P-LOAD
1      1.2444         72.743
2      0.7556         44.167
3      0.0000         0.000
4      0.0000         0.000
5      0.0000         0.000
6      0.0000         0.000
7      0.0000         0.000
8      0.7551         44.139
9      1.2449         72.771

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LIVE LOAD CASE # 21 3 TRUCKS

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I      I      I      I      I      I      I      I      I
I      I      I      I      I      I      I      I      I
I      I      I      I      I      I      I      I      I
I      I      I      I      I      I      I      I      I
I      I      I      I      I      I      I      I      I
BEAM  WHEEL FRACTION  P-LOAD
1      1.2444         72.743
2      1.5883         92.846
3      1.1672         68.232
4      0.0000         0.000
5      0.0000         0.000
6      0.0000         0.000
7      0.0000         0.000
8      0.7551         44.139
9      1.2449         72.771

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LIVE LOAD CASE # 22 4 TRUCKS

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I      I      I      I      I      I      I      I      I
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I      I      I      I      I      I      I      I      I
I      I      I      I      I      I      I      I      I
I      I      I      I      I      I      I      I      I
BEAM  WHEEL FRACTION  P-LOAD
1      1.2444         72.743
2      1.5883         92.846
3      1.1672         68.232
4      0.0000         0.000
5      0.0000         0.000
6      0.0000         0.000
7      1.1668         68.203
8      1.5883         92.846
9      1.2449         72.771

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LIVE LOAD CASE # 23 5 TRUCKS

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I      I      I      I      I      I      I      I      I
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I      I      I      I      I      I      I      I      I
I      I      I      I      I      I      I      I      I
BEAM  WHEEL FRACTION  P-LOAD
1      1.2444         72.743
2      1.5883         92.846
3      1.7395         101.685
4      1.2765         74.618
5      0.1512         8.839
6      0.0000         0.000
7      1.1668         68.203
8      1.5883         92.846
9      1.2449         72.771

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70.08' CURB-TO-CURB; 9 BEAMS; 110.00' AVERAGE SPAN

BRIDGE WIDTH 73.330	X1 3.625	X2 3.625	CENTER LINE DISTANCE 36.665			# OF BEAMS 9	REACTION FORCE 58.455	MAXIMUM # OF TRUCKS 5	# OF COLUMNS 3	COLUMN WIDTH 5.000	SKEW ANGLE 0								
D1 3.492	D2 8.293	D3 8.293	D4 8.293	D5 8.293	D6 8.293	D7 8.293	D8 8.293	D9 8.293	D10	D11	D12	D13	D14	D15	D16	D17	D18	D19	D20
XCOL1 13.000	XCOL2 23.665	XCOL3 23.665	XCOL4	XCOL5															
		NO. OF TRUCKS	BEAM 1	BEAM 2	BEAM 3	BEAM 4	BEAM 5	BEAM 6	BEAM 7	BEAM 8	BEAM 9	BEAM 10							
LL CASE 1	1	1	72.743	44.167	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000							
LL CASE 2	2	2	72.743	92.846	68.232	0.000	0.000	0.000	0.000	0.000	0.000	0.000							
LL CASE 3	3	3	72.743	92.846	101.685	74.618	8.839	0.000	0.000	0.000	0.000	0.000							
LL CASE 4	4	4	72.743	92.846	101.685	96.039	83.457	20.871	0.000	0.000	0.000	0.000							
LL CASE 5	5	5	72.743	92.846	101.685	96.039	92.846	95.489	32.903	0.000	0.000	0.000							
LL CASE 6	1	1	0.000	0.000	0.000	0.000	0.000	0.000	0.000	44.139	72.771	0.000							
LL CASE 7	2	2	0.000	0.000	0.000	0.000	0.000	0.000	68.203	92.846	72.771	0.000							
LL CASE 8	3	3	0.000	0.000	0.000	0.000	8.825	74.618	101.671	92.846	72.771	0.000							
LL CASE 9	4	4	0.000	0.000	0.000	20.857	83.443	96.053	101.671	92.846	72.771	0.000							
LL CASE 10	5	5	0.000	0.000	32.889	95.475	92.846	96.053	101.671	92.846	72.771	0.000							
LL CASE 11	1	1	0.000	0.000	0.000	21.146	74.618	21.146	0.000	0.000	0.000	0.000							
LL CASE 12	2	2	0.000	0.000	33.178	95.764	83.732	21.146	0.000	0.000	0.000	0.000							
LL CASE 13	3	3	0.000	0.000	33.178	95.764	92.846	95.764	33.178	0.000	0.000	0.000							
LL CASE 14	4	4	0.000	48.129	101.960	95.764	92.846	95.764	33.178	0.000	0.000	0.000							
LL CASE 15	5	5	0.000	48.129	101.960	95.764	92.846	95.764	101.960	48.129	0.000	0.000							
LL CASE 16	2	2	0.000	0.000	0.000	70.473	92.846	70.501	0.000	0.000	0.000	0.000							
LL CASE 17	3	3	0.000	9.960	74.618	102.806	92.846	70.501	0.000	0.000	0.000	0.000							
LL CASE 18	4	4	0.000	9.960	74.618	102.806	92.846	102.820	74.618	9.974	0.000	0.000							
LL CASE 19	5	5	21.992	84.578	94.918	102.806	92.846	102.820	74.618	9.974	0.000	0.000							
LL CASE 20	2	2	72.743	44.167	0.000	0.000	0.000	0.000	0.000	44.139	72.771	0.000							
LL CASE 21	3	3	72.743	92.846	68.232	0.000	0.000	0.000	0.000	44.139	72.771	0.000							
LL CASE 22	4	4	72.743	92.846	68.232	0.000	0.000	0.000	68.203	92.846	72.771	0.000							
LL CASE 23	5	5	72.743	92.846	101.685	74.618	8.839	0.000	68.203	92.846	72.771	0.000							

FOR PIER PROGRAM INPUT

61LL 1 1 72742	0	44167	0	0	0	0	0	0	0	0	0	0							
62 0 0	0	0	0	0	0	0	0	0	0	0	0	0							
61LL 2 2 72742	0	92845	0	68231	0	0	0	0	0	0	0	0							
62 0 0	0	0	0	0	0	0	0	0	0	0	0	0							
61LL 3 3 72742	0	92845	0101684	74617	0	8839	0	0	0	0	0	0							
62 0 0	0	0	0	0	0	0	0	0	0	0	0	0							
61LL 4 4 72742	0	92845	0101684	96038	0	83456	0	20871	0	0	0	0							
62 0 0	0	0	0	0	0	0	0	0	0	0	0	0							
61LL 5 5 72742	0	92845	0101684	96038	0	92845	0	95488	32903	0	0	0							
62 0 0	0	0	0	0	0	0	0	0	0	0	0	0							
61LL 6 1 0	0	0	0	0	0	0	0	0	0	0	0	0							
62 44139	0	72771	0	0	0	0	0	0	0	0	0	0							
61LL 7 2 0	0	0	0	0	0	0	0	0	68203	0	0	0							
62 92845	0	72771	0	0	0	0	0	0	0	0	0	0							
61LL 8 3 0	0	0	0	0	0	8824	0	74617	101670	0	0	0							
62 92845	0	72771	0	0	0	0	0	0	0	0	0	0							
61LL 9 4 0	0	0	0	0	20857	0	83442	0	96052	101670	0	0							
62 92845	0	72771	0	0	0	0	0	0	0	0	0	0							
61LL10 5 0	0	0	0	32889	95474	0	92845	0	96052	101670	0	0							
62 92845	0	72771	0	0	0	0	0	0	0	0	0	0							
61LL11 1 0	0	0	0	0	21146	0	74617	0	21146	0	0	0							
62 0	0	0	0	0	0	0	0	0	0	0	0	0							
61LL12 2 0	0	0	0	33178	95763	0	83731	0	21146	0	0	0							
62 0	0	0	0	0	0	0	0	0	0	0	0	0							
61LL13 3 0	0	0	0	33178	95763	0	92845	0	95763	33178	0	0							
62 0	0	0	0	0	0	0	0	0	0	0	0	0							
61LL14 4 0	0	48128	0101959	95763	0	92845	0	95763	33178	0	0	0							
62 0	0	0	0	0	0	0	0	0	0	0	0	0							
61LL15 5 0	0	48128	0101959	95763	0	92845	0	95763	33178	0	0	0							
62 48128	0	0	0	0	0	0	0	0	0	0	0	0							
61LL16 2 0	0	0	0	0	70473	0	92845	0	70501	0	0	0							
62 0	0	0	0	0	0	0	0	0	0	0	0	0							
61LL17 3 0	0	9959	0	74617	102805	0	92845	0	70501	0	0	0							
62 0	0	0	0	0	0	0	0	0	0	0	0	0							
61LL18 4 0	0	9959	0	74617	102805	0	92845	0102819	74617	0	0	0							

62	9973	0	0						
61LL19	5 21991	0 84577	0 94918102805	0 92845	0102819 74617	0			
62	9973	0							
61LL20	2 72742	0 44167	0 0 0	0 0	0 0 0	0			
62	44138	0 72771							
61LL21	3 72742	0 92845	0 68231 0	0 0	0 0 0	0			
62	44138	0 72771							
61LL22	4 72742	0 92845	0 68231 0	0 0	0 0 68203	0			
62	92845	0 72771							
61LL23	5 72742	0 92845	0101684 74617	0 8839	0 0 68203	0			
62	92845	0 72771							